

# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

217/782-6762

August 20, 2002

Mr. Michael Ribordy
U.S. EPA Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Re:

1631215032 St. Clair County

Sauget Area 2 Site Superfund/Technical

Revised Proposal to Modify the Aquatic Sampling and Risk Assessment Protocols

Dear Mr. Ribordy:

The Illinois Environmental Protection Agency ("Illinois EPA") received a copy of the Sauget Area 2 Sites Group ("SA2SG") Revised Proposal to Modify the Aquatic Sampling and Risk Assessment Protecols, dated June 2002, on June 18, 2002.

Based upon my review of this submittal, I have the following comments for your consideration. The comments follow the same numbering format as the submittal.

## **Item 5, Second Sentence**

Comment: Illinois EPA did not receive the attached figure.

#### Item 9, First Sentence

Comment: Illinois EPA recommends four surface water samples, in addition to sediment samples, be collected for the screening survey conducted at the 450 foot transect, and analyzed for volatile organics on a rapid turn-around.

## Item 9, Fifth Sentence

Comment: Add, "and screening will again take place at the 600 foot interval", to "Should the samples be positive...", so that it reads: "Should the samples be positive, 450-foot sampling locations will be included in the full sediment sampling program, and screening will again take place at the 600 foot interval."

## Item 9, Sixth Through Ninth Sentences

Comment: The objective of this assessment should be to define the east to west potential distribution of constituents of concern, as well as north to south distribution, so as to

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define nature and extent of contamination. The discussion of potential remedial actions is not appropriate at this time. The language starting with "However, SA2SG notes...", and ending with, "...needs to be considered." (sixth through ninth sentences) should be deleted.

## Item 11, First Sentence

Comment: Analysis of sediment samples for volatile organic compounds and semi-volatile organic compounds is based on the assumption that the types of chemicals and concentrations of chemicals between Site R and Site Q are similar. Further, it is assumed the majority of the impacts found at Site R, i.e., at the 150 foot interval, will also occur at Site Q. It is important to note that these assumptions have not been demonstrated.

## Item 11, Fourth Sentence

Comment: Based on the previous comment (regarding Item 11, first sentence), sediment analyses for the full spectrum of organic and inorganic constituents should be performed on samples collected at the 50 foot and 300 foot intervals, in addition to the 150 foot interval. Illinois EPA recommends eight samples at the 50 foot interval and 4 samples at the 300 foot interval. The sampling locations would be evenly distributed downgradient of Site P, downgradient of the fly ash ponds, downgradient of the construction fill area, and downgradient of the fill area at the southern end of Site Q. For clarification, the complete chemical scan should be VOCs, SVOCs, metals, PCBs, and dioxin.

#### Item 11, Fifth Sentence

Comment: Illinois EPA recommends evaluating the need for macroinvertebrate samples to assess community structure. There may be a problem extrapolating from Site R to Site Q regarding habitat.

#### **Item 13, First Sentence**

Comment: Aquatic toxicity testing can be used to determine the toxicity of a combination of chemicals, such as the results for testing downgradient of Site R. However, if the chemicals downgradient of Site Q are different than Site R, or present in different concentrations, the results of aquatic toxicity testing at Site R may not be relevant for Site Q. Based on the previous comment (regarding Item 11, first sentence), Illinois EPA recommends aquatic toxicity testing in addition to full chemical scans. The Illinois EPA recommends aquatic toxicity testing of water samples and sediment samples at the following locations: 8 sample locations at the 50 foot interval, 12 sample locations at the 150 foot interval, and 4 sample locations at the 300 foot interval. The sampling locations would be evenly distributed downgradient of Site P, downgradient of the fly ash ponds, downgradient of the construction fill area, and downgradient of the fill area at the southern end of Site Q.

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#### Item 14, First Sentence

Comment: The Illinois EPA disagrees with this statement. Pore water analysis during sediment analysis will not necessarily provide a worst case scenario for surface water.

## **Item 14, Second Sentence**

Comment: Illinois EPA does not conceptually agree with the premise that dissolved constituents could not be present in the surface water without also being present in the sediments.

#### Item 14, Third Sentence

Comment: Illinois EPA does not agree that surface water/sediment sampling at two locations at the 150 foot interval will confirm the premise that dissolved constituents could not be present in surface water without also being present in the sediments. Sediment sampling should not replace surface water sampling.

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## Item 14, Fourth Sentence

Comment: The Illinois EPA recommends surface water sampling at the following locations: 8 sample locations at the 50 foot interval, 12 sample locations at the 150 foot interval, and 4 sample locations at the 300 foot interval. The surface water samples must be collected from the water column just above the sediment layer.

In summary, Illinois EPA recommends the following revisions to the aquatic sampling proposal.

Transect*	Number of Samples		
	Sediment	Water	Bioassays
	Complete Scan	Complete Scan	Water and Sediment
50 Feet	8	8	8 + 8
150 Feet	12	. 12	$12 \pm 12$
300 Feet	4	4	4+4

<sup>\*</sup> The sampling locations would be evenly distributed downgradient of Site P, downgradient of the fly ash ponds, downgradient of the construction fill area, and downgradient of the fill area at the southern end of Site Q.

The above could supercede and replace the sampling proposed in the June 2002 submittal. Further, there would be no need to demonstrate Site Q is similar to Site R.

Should you have any questions or comments on the contents of this letter, please feel free to contact me at 217/557-3199.

Sincerely,

Sandra Bron

Sandra Bron, Remedial Project Manager National Priorities List Unit Federal Site Remediation Section Bureau of Land

Cc: Mike Henry, IDNR Kevin de la Bruere, USFWS

Terry Ayers, Manager, NPL Unit